AMENDMENTS TO THE CLAIMS

1.   (Currently Amended) A method comprising:
        dynamically establishing a plurality of ATM adaptation layer 2 (AAL2) ~~virtual channel connection (VCC)~~ channel identifiers (CIDs) on a call-by-call basis using an ATM standards-based call control signaling ~~protocols~~ protocol by mapping each of the CIDs, for submultiplexed cells that will be within an AAL2 stream in a single virtual channel connection, VCC, that connects a network edge device to a network access gateway, to a respective virtual path/virtual channel (VP/VC) within a virtual user network interface (UNI) ~~to an ATM network~~ of the protocol and wherein during call set-up, each of the plurality of CIDs is individually set up and signaled as the respective VP/VC within a virtual UNI.

Claims 2-4 (Canceled).

5.   (Currently Amended) A method comprising mapping a plurality of ATM adaptation layer 2 (AAL2) channel identifiers (CIDs) of ~~one or more virtual channel connections (VCCs)~~ a plurality of channels that will be within an AAL2 stream in a single virtual channel connection (VCC), to a plurality virtual path/virtual channel (VP/VC), respectively, within a user network interface, UNI, of a standards-based ATM call control protocol and wherein, during call set-up, each of the plurality of CIDs is individually set up and signaled as a respective one of the plurality of VP/VC, within the UNI.

6.   (Currently Amended) The method of claim 5 wherein the standards-based ATM call control protocol is ~~selected from the list comprising UNI 3.1/4.0 and Q.2931~~ selected from the group consisting of Q.2931, UNI 3.0, UNI 4.0, and UNI 4.1.

7.   (Previously Presented) The method of claim 5 wherein the mapping is performed at a network edge device communicatively coupled to customer premises equipment.

8.   (Original) The method of claim 7 wherein the network edge device is communicatively coupled to the customer premises equipment over time division multiplexed communication channels.

9.   (Previously Presented) The method of claim 8 further comprising multiplexing the time division multiplexed communication channels to one or more AAL2 VPs/VCs.

10.   (Currently Amended) The method of ~~claim 9 further comprising mapping the one or more AAL2 VPs/VCs to the CIDs prior to mapping the CIDs to the VP/VC~~claim 5 wherein the CIDs are mapped into connection reference fields of the protocol.

11.   (Currently Amended) Computer-readable instructions, which when implemented by a processor, cause the processor to provide end to end ~~AAL2~~ switched virtual circuit voice service over a core ATM network, network access gateways to said core ATM network, and network edge devices that convert between voice channels and AAL2 streams, the latter used to communicate with one of the gateways, by configuring an originating network edge device to set up a call with a destination network edge device using an ATM Forum promulgated signaling protocol that specifies procedures for establishing, maintaining, and clearing network connections, and wherein the originating network edge device maps a respective virtual path identifier/virtual circuit ~~(VP/VC)~~identifier (VPI/VCI) within a virtual user network interface that is referenced in a cell header in accordance with the ATM forum promulgated signaling protocol, to ~~a channel identifier (CID) of a designated AAL2~~each of a plurality AAL2 channel identifiers (CIDs) of a stream of AAL2 sub-cells in a single virtual channel connection (VCC) and ~~sends this signaling information~~ wherein each of the plurality of CIDs is individually set up and signaled as the respective VPI/VCI, formatted in accordance with said ATM Forum promulgated signaling protocol, to said one of the network access gateways.

12.   (Currently Amended) The computer-readable instructions of claim 11, wherein the computer-readable instructions are embodied in a computer readable medium and the signaling protocol is selected from the group consisting of Q.2931, UNI 3.0, UNI 4.0, and UNI 4.1.

13.   (Currently Amended) The computer-readable instructions of claim 11 further comprising additional instructions, which when implemented by the processor, cause the processor to multiplex ~~one or more~~a plurality of time division multiplexed

communication channels from customer premises equipment, to ~~one or more~~a plurality of AAL2 VPs/VCs prior to mapping the CID to the respective ~~VP/VC~~VPI/VCI.

14.   (Canceled).

15.   (Currently Amended) A network edge device comprising:
       means for receiving voice information from channels associated with customer premises equipment;
       means for multiplexing the received voice information into AAL2 cells;
       means for setting up a switched virtual circuit using an ATM forum user to network interface, UNI; and
       means for ~~mapping, in a manner that is transparent to the setting up means,~~ ~~a~~setting up and signaling each AAL2 CID, of a plurality of AAL2 channels that are in an AAL2 stream within a single virtual channel connection between the network edge device and a network access gateway, individually as a respective VP/VC that is associated with a UNI port ~~to a CID on a designated AAL2 VCC that forms part of the UNI's virtual path between the network edge device and a network access gateway~~of said UNI.

16.   (Previously Presented) The network edge device of claim 15 wherein the UNI comprises Q.2931.

17.   (Previously Presented) The network edge device of claim 15 wherein the UNI comprises UNI 4.0.

18.   (Previously Presented) The network edge device of claim 15 wherein the UNI comprises UNI 3.1.

19.   (Previously Presented) The network edge device of claim 15 wherein the receiving means comprises part of a time division multiplexed communication channel to the customer premises equipment.

20.   (New) The method of claim 1 wherein the standards-based ATM call control protocol is selected from the group consisting of Q.2931, UNI 3.0, UNI 4.0, and UNI 4.1.